# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D205-770 REV. C AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D205-770 REV. 2

REF. TCCA STC: SH08-8

REF. FAA STC: SR02690NY / SR02070SE REF. EASA STC: EASA.IM.R.S.01528

#### 1.0 PURPOSE

On D205-770-011 Replacement Engine Mount Kits at CHG 006 or later, the AN3C12A Bolts, D3692-1 Spacers, and MS21043-3 Nuts on the upper and lower ends of each leg are replaced with HL32PB8-11/-14 Hi-Lok Pins and HL86-8 Hi-Lok Collars to prevent premature loosening and/or bolt failure in service. The adhesive used to assemble the rod end bearings has also been changed from Sikaflex-291/Proseal 890 to Hysol 934NA or Magnabond 6398. Customers with D205-770-011 Replacement Engine Mount Kits at CHG 005 or earlier are encouraged to procure the DSI 9638-011 Kit from Dart to upgrade their existing kits. Note: this service instruction supersedes DSI 9571.

#### 2.0 INSTALLATION

- 2.1 Remove the engine mounts from the aircraft per ICA-D205-770. Inspect D3693-1 Rod End Bearings for play and for suitability for continued service. Replace if required.
- 2.2 Remove qty(1) AN3C12A Bolt from each end of each engine mount leg. Ensure holes are not elongated more than 0.030". If holes are elongated by more than 0.030", then parts will need to be replaced.
- 2.3 Clean each hole using drill bit P/N 08-550.
- 2.4 Enlarge each hole using Piloted Drill P/N 13-420.
- 2.5 Ream each hole to Ø0.248 using Step Reamer P/N 44-300.
- 2.6 Install an AN4-12A Bolt and MS21042-4 Nut in each reamed hole and tighten.
- 2.7 Remove remaining AN3C12A Bolts and repeat steps 2.2 through 2.4.
- 2.8 Mark each end of the legs to ensure all parts will be re-assembled in original location and orientation.
- 2.9 Disassemble engine mounts, de-burr, and clean all parts making sure to remove all traces of existing sealant while keeping intact the markings performed at Step 2.8.
- 2.10 Re-assemble engine mounts using Hysol 934NA or Magnabond 6398 adhesive and P/N HL32PB8-11/-14 and HL86-8 Hi-Lok fasteners.
  - Note: Before permanent installation of hi-loks on the D3684-041 Tripod Assembly, confirm clearance of engine throttle linkage and position hi-lok collars to maximize clearance.
- 2.11 Make an entry in the log book that the replacement engine mount kit has been reworked to DSI 9638 Rev. B, and re-install the engine mounts in the aircraft per ICA-D205-770.

### 3.0 PARTS LIST

Qty -011	Part Number	Description
Х	DSI 9638-011	UPGRADE KIT
2	HL32PB8-11	HI-LOK PIN
22	HL32PB8-14	HI-LOK PIN
24	HL86-8	HI-LOK COLLAR
1	08-550	DRILL BIT
1	13-420	PILOTED DRILL
1	44-300	STEP REAMER

## 4.0 WEIGHT & BALANCE

This change has negligible effect on weight and balance

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

BY:
D. SHEPHERD (DE # 02)

DATE:
12.12.21
CERT. NO.:
SH08-8
ISSUE NO.:
1

В	ADDED WARNING ABOUT ORIENTATION OF HY-LOKS			MB	12.12.20
Α	NEW ISSUE			MB	12.11.26
REV.	DESCRIPTION			BY	DATE
DESIGN		143	DART AEROSPA	<b>ACE</b>	LTD
DRAWN		Js.	HAWKESBURY, ONTARI		
CHECK	ΞD	P	DRAWING NO.		REV. B
MFG. AF	PPR.	N/A	DSI 9638		SHEET 1 OF 2
APPRO	√ED	NO	TITLE		SCALE
DE APP	R.		ENGINE MOUNT UPGRADE KIT		NTS
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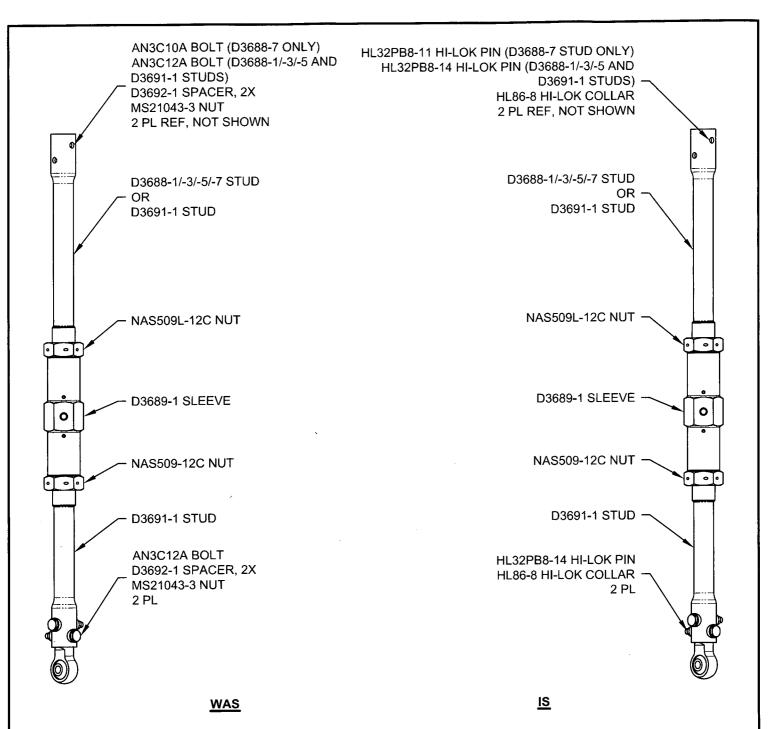


FIGURE 5: TYPICAL LEG ASSEMBLY (IIN-D205-770)
FIGURE 71-2: TYPICAL LEG ASSEMBLY (ICA-D205-770)

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DESIGN	_JB	DART AEROSPACE LTD		
DRAWN	_4	HAWKESBURY, ONTARIO, CANADA		
CHECKED	P	DRAWING NO.	REV. B	
MFG. APPR.	N/A	DSI 9638	SHEET 2 OF 2	
APPROVED	10	TITLE	SCALE	
DE APPR.	*	ENGINE MOUNT UPGRADE KIT	NTS	
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